

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| | | |
|---|---|--|
| Applicant's or agent's file reference IPD/P1174/WOD | FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below. | |
| International application No. PCT/GB 98/ 01026 | International filing date (day/month/year) 07/04/1998 | (Earliest) Priority Date (day/month/year) 11/04/1997 |
| Applicant THE SECRETARY OF STATE FOR DEFENCE et al. | | |

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ **Certain claims were found unsearchable** (see Box I).
2. ☐ **Unity of invention is lacking** (see Box II).
3. ☒ The international application contains disclosure of a **nucleotide and/or amino acid sequence listing** and the international search was carried out on the basis of the sequence listing
 - ☒ filed with the international application.
 - ☐ furnished by the applicant separately from the international application,
 - ☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.
 - ☐ Transcribed by this Authority
4. With regard to the **title**,
 - ☐ the text is approved as submitted by the applicant
 - ☒ the text has been established by this Authority to read as follows:
ENZYME ASSAY FOR MUTANT FIREFLY LUCIFERASE
5. With regard to the **abstract**,
 - ☒ the text is approved as submitted by the applicant
 - ☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International Search Report, submit comments to this Authority.
6. The figure of the **drawings** to be published with the abstract is:
 - Figure No. ☐ as suggested by the applicant. ☐ None of the figures.
 - ☐ because the applicant failed to suggest a figure.
 - ☐ because this figure better characterizes the invention.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 98/01026

CLASSIFICATION OF SUBJECT MATTER
 IPC 6 C12N9/02 C12N15/53 C12N15/79 C12N15/82 C12N15/85
 C12N15/63 C12Q1/66

According to International Patent Classification(IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12N C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------------|
| X | E.I. DEMENTIEVA ETAL.,: "Physicochemical properties of recombinant Luciola mingrellica luciferase and its mutant forms" BIOCHEMISTRY, vol. 61, no. 1, 1996, pages 115-119, XP002078631 Moscow, RU cited in the application see the whole document --- | 1-3 |
| A | W0 96 22376 A (SECR DEFENCE BRIT) 25 July 1996 cited in the application see abstract see page 1, paragraph 4-5 - page 2, paragraph 1 see page 3, paragraph 1; example 2 --- -/-- | 1,10-12, 20,24, 25,35 |

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance
 "E" earlier document but published on or after the international filing date
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
 "O" document referring to an oral disclosure, use, exhibition or other means
 "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
 "&" document member of the same patent family

Date of the actual completion of the international search

28 September 1998

Date of mailing of the international search report

13/10/1998

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Mateo Rosell, A.M.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 98/01026

(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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| A | <p>WO 95 18853 A (PROMEGA CORP) 13 July 1995 cited in the application</p> <p>see abstract see page 6, line 30 - page 7, column 31; tables I,III</p> <p>---</p> | 1,10-12, 14-17, 24,25,35 |
| A | <p>WO 95 25798 A (SECR DEFENCE BRIT) 28 September 1995 cited in the application see page 3, paragraph 3 - page 4, paragraph 1 see page 5, paragraph 2 see page 6, paragraph 3; examples 3,4,10</p> <p>---</p> | 1,10,12 |
| A | <p>EP 0 449 621 A (KIKKOMAN CORP) 2 October 1991 see page 2, column 1-37 see page 3, line 39-45</p> <p>---</p> | 1,12 |
| A | <p>US 5 196 524 A (GUSTAFSON GARY D ET AL) 23 March 1993</p> <p>see column 5, line 30 - column 9, line 40; examples 4-6</p> <p>---</p> | 1,13-19, 22-27, 31,33,34 |
| A | <p>E.I. DEMENTIEVA ET AL., : "Assay of ATP in intact Escherichia coli cells expressing recombinant firefly luciferase" BIOCHEMISTRY, vol. 61, no. 7, 1996, pages 915-920, XP002078632 Moscow, RU see the whole document</p> <p>---</p> | 1,24-27, 30 |
| A | <p>Y. LIU ET AL., : "Factors influencing the efficiency of cationic liposome-mediated intravenous gene delivery" NATURE BIOTECHNOLOGY, vol. 15, 1997, pages 167-173, XP002078633 cited in the application see the whole document</p> <p>-----</p> | 1,33 |

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Information on patent family members

International Application No

PCT/GB 98/01026

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
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